Recommendation from the Community Preventive Services Task Force for Use of Collaborative Care for the Management of Depressive Disorders

Community Preventive Services Task Force

Summary: The Community Preventive Services Task Force recommends collaborative care for management of depressive disorders, based on strong evidence of effectiveness in improving depression symptoms, adherence to treatment, response to treatment, and remission and recovery from depression.

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The widespread prevalence of depressive disorders and the large disease burden from these disorders is well established.[1,2] Primary care remains the most frequent point of entry into the healthcare system for patients with depression symptoms, and nearly 60% of patients with depression continue to receive care at the primary care level.[3] Hence, engagement in primary care to reduce morbidity and mortality from depression would include optimizing two processes: screening and treatment. The U.S. Preventive Services Task Force recommends screening for depression in adults (www.uspreventiveservicestaskforce.org/uspstf/uspsaddepr.htm) and adolescents (www.uspreventiveservicestaskforce.org/uspstf/uspschdepr.htm) in outpatient primary care settings, when adequate systems are in place for efficient diagnosis, treatment, and follow-up for depressive disorders.[4,5]

Collaborative Care Model

One method of establishing these adequate systems is the adoption of an integrated "collaborative care" model for managing depressive disorders, based on the Chronic Care Model.[6,7] This approach calls for mobilizing resources efficiently in the healthcare system and the community to allow for more informed interaction between patients with depression and their providers.

The Community Preventive Services Task Force (Task Force) defines collaborative care for managing depressive disorders as a multicomponent, healthcare system–level intervention using case managers to link primary care providers, patients, and mental health specialists. This collaboration is designed to (1) improve routine screening and diagnosis of depressive disorders; (2) increase provider use of evidence-based protocols for proactive management of diagnosed depressive disorders; and (3) improve clinical and community support for active patient engagement in treatment goal setting and self-management.

Collaborative care models[8] typically employ case managers to support primary care providers with functions such as patient education; patient follow-up to track depression outcomes and adherence to treatment; and adjustment of treatment plans for patients who do not improve. Primary care providers are usually responsible for routine screening and diagnosing of depressive disorders, prescribing antidepressants, and referring patients to mental health specialists as needed. These mental health specialists provide clinical advice and decision support to primary care providers and case managers. These team-based integrated care processes are frequently coordinated by technology-based resources, such as electronic medical records, telephone contact, and provider-reminder mechanisms.

Intervention Recommendation and Economic Finding

The Community Preventive Services Task Force (Task Force) recommends collaborative care for management of depressive disorders, based on strong evidence of effectiveness in improving depression symptoms, adherence to treatment, response to treatment, and remission

The names and affiliations of the Task Force members are available at www.thecommunityguide.org/about/task-force-members.html.

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and recovery from depression. The Task Force also finds that collaborative care models provide good economic value based on evidence from studies that assessed both costs and benefits. The rationale used by the Task Force to reach this finding is described below. Details of the systematic reviews of effectiveness and economic efficiency, on which the rationale and the recommendations are based, are provided in the accompanying articles.[9,10]

Rationale for Effectiveness Finding

Basis of Finding

The finding of strong evidence of effectiveness is based on two sources of evidence on the effectiveness of collaborative care in comparison to usual care for people with a primary diagnosis of depressive disorder: (1) the current systematic review of 32 studies published between 2004 and 2009[9] and (2) an earlier systematic review[11] that identified 37 RCT studies published between 1966 and 2004.

Results from the current review showed a significant treatment effect for depression symptoms from 28 studies, standardized mean difference (SMD; Hedges' *g*)=0.34 (95% CI=0.25, 0.43), and for multiple other depression-related outcomes of sufficient magnitude to be of clinical significance and public health benefit. Findings from the earlier review[11] were similar to comparable outcomes from the current review (i.e., "improvement in depression symptoms" from 34 studies, SMD=0.24, 95% CI=0.17, 0.32, and "positive effect on antidepressant use," from 28 studies that included "adherence to treatment" and "antidepressant use," OR=1.92, 95% CI=1.54, 2.39). Thus, the magnitude of effect estimates, number of studies, and consistency of effects provide the basis for the finding of strong evidence of effectiveness.

Applicability of Finding

Population. Most evidence supporting effectiveness of collaborative care in the current review came from studies that targeted women and men in adult (aged 20–64 years) or older adult (aged ≥65 years) populations and consisted of mostly white populations with over-representation of African Americans and under-representation of other minorities. Limited evidence from studies that specifically targeted certain populations (e.g., adolescents,[12] African Americans,[13] and Latinos[14,15]) was similar to the overall effect estimate. Most studies were conducted in the U.S.; similar effects were found in studies conducted outside the U.S. This suggests that collaborative care should apply broadly across a diverse range of populations. Information on SES of patients from two studies targeting low-income populations suggested that collaborative care interventions are effective in these populations.

Team members. Nearly all studies had physicians in the role of "primary care provider"; studies[16–18] that used nurses or physician assistants in this role reported comparable effects. Nurses served as "case managers" in most studies. When social workers and master's-level mental health workers with limited past clinical experience assumed this role, intervention effects were smaller,[19–21] which likely reflects the need for further skills development. Psychiatrists or psychologists served as "mental health specialists" in most studies. Sometimes physicians or nurses with advanced training served in this role,[12,22] with similar effect estimates.

Organization. Results indicate that collaborative care interventions are effective when implemented by a variety of organizations, including MCOs; academic medical centers; community-based organizations; the Veterans Affairs system (VA); and universal health coverage systems (e.g., the National Health Service in the United Kingdom). Specific considerations regarding "usual care" in the context of the VA are presented in more detail in the accompanying article.[9]

Setting. Evidence from included studies also suggests that collaborative care is applicable in a range of settings that span and link outpatient and inpatient care. Limited evidence was available for collaborative care models that also included community settings for the delivery of care. Results from studies that included home-based care[23,24] were similar to the overall estimate, and the one study that included a worksite component[19] found a smaller improvement.

Evidence Gaps

Although this model has also shown benefits for job retention, patient productivity, and improvements in comorbid conditions, challenges remain in implementing collaborative care for children and adolescents, retaining patients in treatment, and overcoming the stigma of mental illness. Innovation is required to identify optimal reimbursement mechanisms, to overcome institutional resistance, and to ensure sustainability of this effective intervention for one of the largest contributors to disease burden.

Rationale for Economic Finding

Basis of Economic Finding

The finding is based on 23 studies on economics of collaborative care interventions for management of depressive disorders, including two studies modeling interventions in decision analysis frameworks.[10] All monetary

values reported here are in 2008 dollars. An earlier systematic economic review[25] examined RCTs of collaborative care and reported incremental net costs of $17,000 to $39,000 per quality-adjusted life-year (QALY), which are cost effective based on the conventional threshold of cost effectiveness.

Based on 13 studies that provided estimates of program costs, the costs per person per year for collaborative care ranged from $104 to $2160, with a median of $436. Variation in program costs is partly explained by the number of case manager–patient contacts; if contact was by phone or in person; and if staff training costs or costs of electronic care management systems were included.

Of five cost–benefit studies, four showed that averted healthcare costs, productivity losses, or estimates of what patients were "willing to pay" for treatment exceeded program costs, indicating that the interventions were cost beneficial. Six studies reported incremental net costs per QALY. In five, estimates ranged from $3,000 to $71,000, with four reporting less than $21,000, indicating that the interventions were cost effective by the conventional threshold for cost effectiveness. Two studies based on decision models of primary care practice demonstrated that collaborative care could be cost effective, one comparing collaborative care to usual care and the other comparing collaborative care that included pharmaceutical treatment to pharmaceutical treatment alone.

Evidence Gaps: Economic Efficiency

More economic evaluations are needed to assess the full benefit of these interventions by accounting for both healthcare use and workplace productivity effects. A clearer separation is needed between the program costs of implementing collaborative care and the costs of healthcare use.

Using the Recommendation

Collaborative care is a multicomponent, healthcare system–level intervention that requires organizational changes to be implemented successfully for improved management of depressive disorders. The findings from the reviews of evidence on effectiveness and economic analyses demonstrate that collaborative care models are effective in improving depression outcomes and provide good economic value. Further, the results suggest applicability of collaborative care models in most primary care settings and for most adult populations. Hence, these results are likely to be helpful in guiding healthcare organizations and systems committed to investing resources, both in infrastructure and professional staff, to improve the quality of delivery of depression care to subsequently lead to improvements for patients with depression.

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